TITLE:	**Shielding Verification Process**
***CATEGORY*:**	**Operations**
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REVIEW PERIOD:	**Annual**

ABSTRACT:

1. Check that the Front End installation and checkout are complete. This task may involve the Experimental Facilities Division, Experimental Facilities Engineering group.

2. BCRRT shall request scheduled time from the MCR to perform shielding verification.

3. Check that the PSS/EPS installation and checkout are complete (ASD-SI). Validation is an issue to check (in case certain PSS signals require being jumpered, etc.).

4. Check that an approved Commissioning Activity Approval form for the shielding verification is available (CCSM, APS Assigned Health Physicist).

5. Visually check and verify by measurement the locations of the stops and collimators inside the station against the ray tracing provided by the beamline staff. If necessary, additional shielding may be installed.

6. Visually check the station shielding integrity, doors, labyrinths, seams, etc. Make sure that all the labyrinths are sealed and tagged in accordance with the Radiation Safety System policy.

7. Check that a photon stop (cooled for ID/non-cooled for BM) & bremsstrahlung stop have been installed at the downstream end of the station.

8. Check and verify that a Configuration Control Components List is posted and all components under Configuration Control are tagged in accordance with the Radiation Safety System policy.

9. Confirm ozone protection of Be windows (as needed) and water cooling is on for Front End components.

10. Install sealed flight paths, ozone monitor, air blower and ozone destruct unit (if necessary) in the station and check for proper operation.

11. Install synchrotron radiation (Al) targets with radiation sensitive paper at the appropriate locations inside the station. In the case of ID beamlines, make sure that the chiller is on, connected to the targets with the temperature is set below 5 degrees C.

12. Check stations for proper tie-off points (anchors, etc) or railings, or provide for alternate means of accessing station roofs.

13. Provide necessary equipment for Health Physics Survey (ladders, stands, scissor lift, etc.). Confirm that Health Physics has the correct survey maps for the station(s).

14. Request that Health Physics rope off and post notice of the specified Commissioning Area.

15. Begin shielding verification as per specific procedure.